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Dated 9 September 2003

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Patents Form 1/77

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Claim(s)	1/			
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10. If you are also filing any of the following, state how many against each item.				
Priority documents	- · · · · · · · · · · · · · · · · · · ·			
Translations of priority documents	- -			
Statement of inventorship and right to grant of a patent (Patents Form 7/77)	-			
Request for preliminary examination and search (Patents Form 9/77)	1 /			
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Mr A S Giles

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## A CONTAINER HAVING AN INSECT GUARD

This invention relates to a container having an insect guard, and particularly although not exclusively relates to a modified ring pull for a beverage can which prevents the ingress of wasps into the can.

## BACKGROUND OF THE INVENTION

10 Beverage cans with ring pulls are extremely widely used throughout the world. Certain insects are attracted to sweet beverages and can get into unattended beverage cans, so that the insect can be swallowed when a person drinks from the can. This experience is always

15 extremely distressing, but if the insect stings, the incident can become life-threatening. The insect which is responsible for the largest number of serious incidents in Europe is the European wasp (Vespula)

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## STATEMENT OF INVENTION

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A container having an insect guard comprising a ring pull with an opening, the insect guard being movable over an outlet of the container, the opening being sized to prevent the ingress of insects into the outlet whilst enabling the contents of the container to be poured out.

Preferably, the opening comprises a slot formed in the ring pull. Preferably the slot is arcuate.

Preferably, the slot is elongate and is longer than it is wide. Preferably, the width of the slot is no greater than 3.5 mm.

Preferably, the ring pull is moveable from a first position, in which the container can be opened to a second position over the said outlet.

Preferably, the opening comprises a recess which may be formed in an edge of the ring pull.

## BRIEF DESCRIPTION OF THE DRAWING

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For a better understanding of the present invention and to show how it may be carried into effect, reference will now be made, by way of example, to the accompanying drawing in which:

Figure 1 is a top view of a closed beverage can;

Figure 2 shows a beverage can in the process of being opened;

Figure 3 shows a ring pull being rotated over a fluid outlet of the can; and

Figure 4 shows a ring pull acting as an insect guard by covering the fluid outlet from the can.

# 30 DETAILED DESCRIPTION OF A PREFERRED EMBODIMENT

For the avoidance of doubt, the term "ring pull" encompasses any type, shape or size of ring pull

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including a ring pull having a cover which is separate from but attached to the ring pull.

Figures 1 and 2 show a container in the form of a beverage can 2 having a top surface 4 in which is formed a fluid outlet 6. As is well known in the art, the fluid outlet 6 of the unopened can is closed by a tab of material 8 which is integrally formed with the top surface 4 of the can, and which is defined by a line of weakening 10 which runs around the periphery of the tab 8.

A ring pull 12 is rotatably connected to the top surface 4 by means of a rivet 14. The ring pull 12 comprises a base portion 16 which is connected to the rivet 14 and a grip portion 18 which is gripped by a user when the can is opened. An elongate arcuate opening 20 is formed substantially across the full width of the grip portion 18 of the ring pull 12. Furthermore, a top edge 22 of the grip portion 18 is relieved, to form a recessed portion 24 of the ring pull 12.

The can 2 is opened with the ring pull 12 in the

25 orientation illustrated in Figure 1. The grip portion

18 is pulled upwardly by a user, so that the base
portion 16 is pivoted down onto the tab 8, causing the
line of weakening 10 to break and the tab to be pushed
down into the drinks can, as illustrated in Figure 2.

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Referring to Figure 3, the ring pull 12 is then pushed back against the top surface 4 of the can 2 and is rotated through 180°, into the orientation illustrated in Figure 4. In this orientation the grip portion 18

covers the fluid outlet 6 in the top surface 4 of the can 2. The width d1 of the arcuate opening 20, and the width d2 of the gap between the recessed portion 24 of the ring pull 12 and the radially outer edge of the fluid outlet 6 are set, so that insects can not enter the can when the can is left unattended. In a preferred embodiment, intended to prevent the ingress of European wasps, d1 and d2 are less than or equal to 3.5 mm.

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Although in the preferred embodiment, the ring pull 12 is provided with an arcuate opening 20 of a particular shape, and the top edge 22 of the ring pull 12 is relieved to form a recessed portion 24, any combination of openings and/or recessed portions in the ring pull 12 are contemplated, provided that the contents of the can can be drunk through the opening(s) and/or recess(es) whilst the ingress of specific insects is prevented.

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### CLAIMS

- 1. A container having an insect guard comprising a ring pull with an opening, the insect guard being moveable over an outlet of the container, the opening being sized to prevent the ingress of insects into the outlet whilst enabling the contents of the container to be poured out.
- 10 2. A container as claimed in claim 1, in which the opening comprises a slot formed in the ring pull.
  - 3. A container as claimed in claim 2, in which the slot is arcuate.

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- 4. A container as claimed in claim 2 or 3, in which the slot is elongate and is longer than it is wide, the width of the slot being less than or equal to 3.5 mm.
- 5. A container as claimed in any one of the preceding claims, in which the ring pull is moveable from a first position in which the container can be opened to a second position over the said outlet.
- 25 6. A container as claimed in any one of the preceding claims, in which the opening comprises a recess.
  - 7. A container as claimed in claim 6, in which the recess is formed in an edge of the ring pull.

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8. A container substantially as described herein with reference to and as shown in the accompanying drawings.

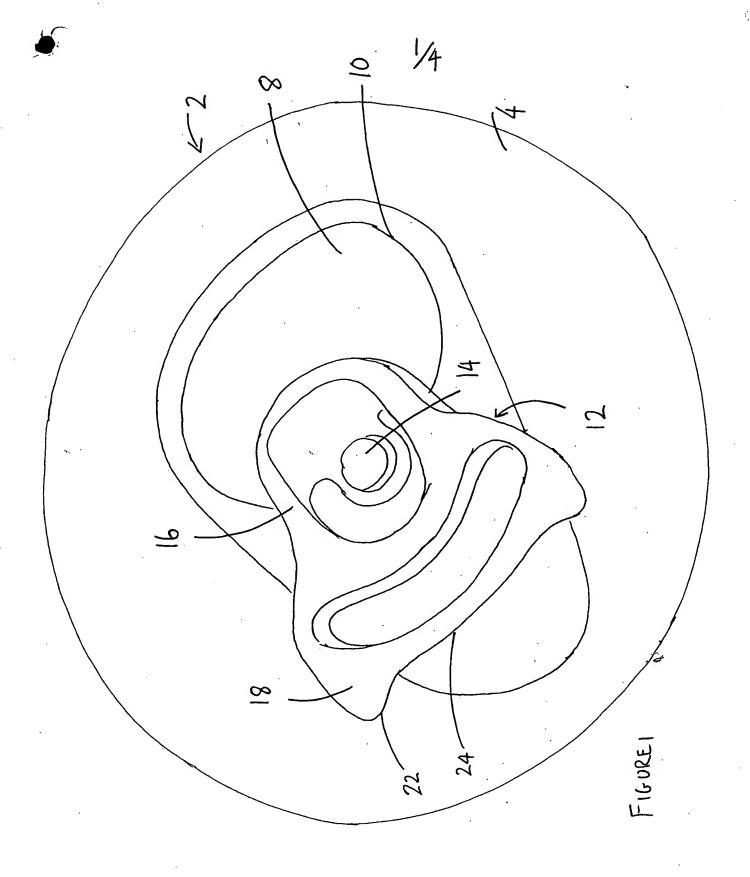
## **ABSTRACT**

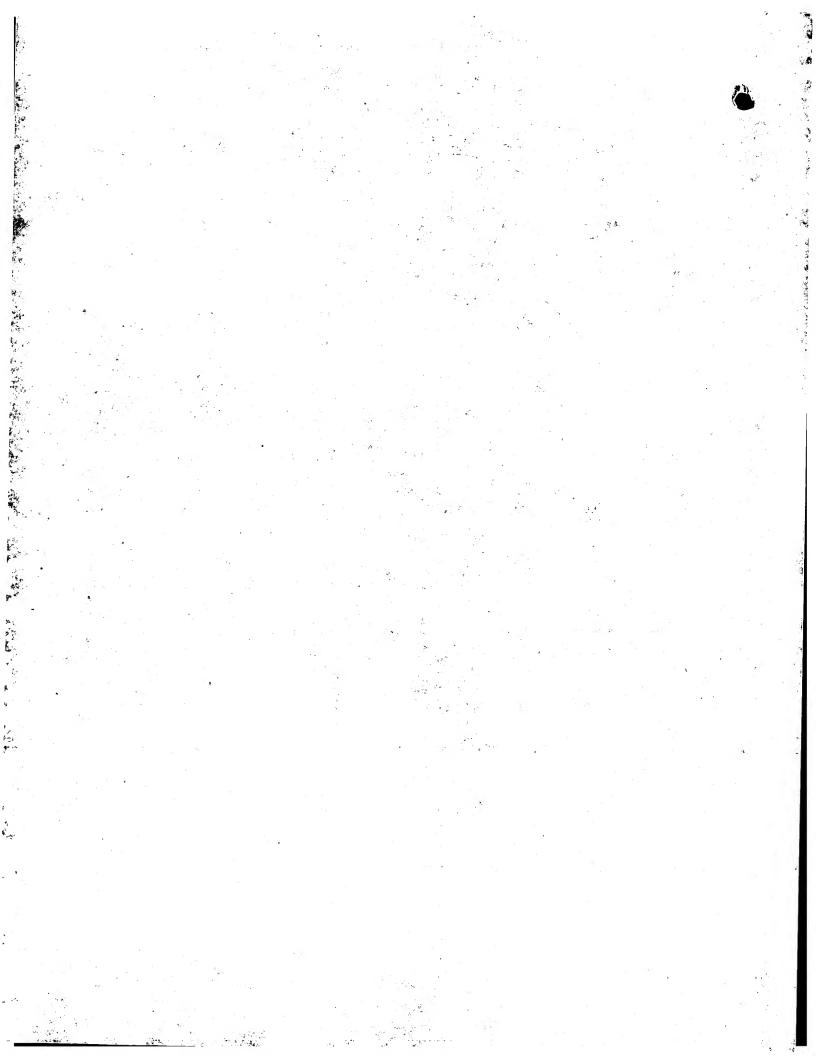
## A CONTAINER HAVING AN INSECT GUARD

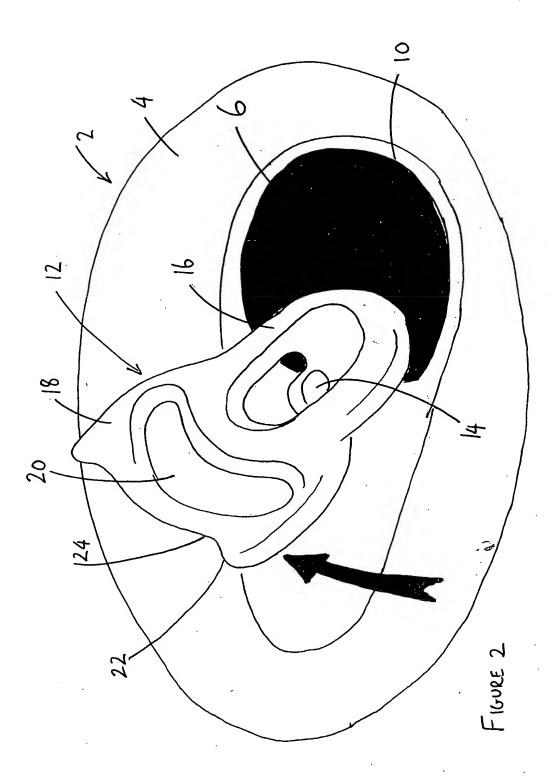
A container having an insect guard comprising a ring pull 12 with an opening 20, the insect guard being moveable over an outlet 6 of the container 2. The opening 20 is sized to prevent the ingress of insects into the outlet 6, whilst enabling the contents of the container 2 to be poured out.

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